5-14-2013

Beta-Blocker Use and Clinical Outcomes in Stable Outpatients With and Without Coronary Artery Disease

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FM Journal Club Bottom Line: Beta-blocker use and clinical outcomes in stable outpatients with and without coronary artery disease

Clinical question: Which patients should be placed/kept on beta-blocker therapy?

Bottom line answer:

- Randomized control trials show beta-blockers benefit patients with systolic congestive heart failure and for the first three years after a patient has a MI.
- Beta-blocker use may not be associated with lower event rates of CV death, non-fatal MI, stroke of hospitalization in patients even with prior history of MI after 3 years.
    - Level 2b evidence: Recent longitudinal study followed 3 cohorts of patients for 44 months with and without beta-blocker use: 1) prior MI 2) CAD no prior MI 3) risk factors for CAD only.
        - There were no significant differences in primary outcomes of cardiovascular death, non-fatal MI or non-fatal stroke in the known MI or CAD without prior MI cohorts
        - In patients with no known CAD history (only risk factors), betablocker use may be associated with increased risk of CV death, non-fatal MI and stroke (HR 1.18, p = 0.02)
        - Secondary outcomes of hospitalization for atheroembolic event and revascularization procedures were increased in patients using beta-blockers who had known CAD but no prior MI and CAD risk factors only.
        - Results were not specified for type or dose of betablocker

Case: 62 year old man who is 5 yrs s/p stent for known MI presents wanting to minimize his medications. Currently taking statin, asa, betablocker, ACEI, metformin. BP 116/72 HgA1c 6.4. Should he stop his betablocker?

Background and supporting evidence:

- AHA 2011 guidelines now recommend betablocker therapy for heart failure patients and MI or ACS patient for 3 years after MI (as class I recommendation)
- AHA guidelines recently changed its recommendation for longterm betablocker therapy from class IIa to class IIb
- European Society of Cardiology now recommends longterm betablocker therapy only for patients with left ventricular systolic dysfunction

Reference: http://www.ncbi.nlm.nih.gov/pubmed/23032550

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